REMARKS/ARGUMENTS

Claims 1-19 remain pending in this application. New claims 11-19 have been added.

Priority

Applicants request acknowledgment of the claim for priority. Submitted herewith is a certified copy of the corresponding Japanese patent application (JP 2000-385050, filed December 19, 2000). An indication that this document has been received would be appreciated.

Drawings

Applicants request clarification as to whether the drawings have been accepted or objected to by the Examiner. The initial box on line 10 has been checked but neither box "a" (accepted) nor box "b" (objected to) has been checked.

35 U.S.C. §103

Claims 1-10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Brendel et al (U.S. Patent No. 5,774,660) in view of Agrawal et al (U.S. Patent No. 6,606,661. These rejections are traversed as follows.

The present invention, as defined in claims 1, 9 and 10, is directed to a load balancer connected to a network connecting a plurality of clients requesting services and a plurality of servers executing operations based on the request from the clients and replying with processing results. The load balancer includes a means for storing totals of the load estimates over a fixed past period for each of the servers. The load balancer also includes means for dynamically selecting a server to which the request data is to be sent based on estimates of processing load on the servers resulting from the current request data and the total load for the servers.

Therefore, according to the present invention, the appropriate amount of load balancing can be performed for the servers even if there is a sudden spike in access. None of the cited references disclose these features of the presently claimed invention.

Brendel et al discloses a load balancer that parses the URL to determine which resource is being requested. Based upon the resource requested by such parsing, the load balancer determines which servers are best suited to satisfy the request. The load balancer then performs load balancing among

the servers that can satisfy the request. Brendel et al also disclose that the load balancer parses the URL to get the file or resource name. Depending upon the requested resource and the location of each resource in the web site, the load balancer determines which servers can satisfy the request and then chooses the least busy of these servers as the assigned server (see column 11, line 51 to column 12, lines 45 and Figs. 10 and 11).

However, Brendel et al do not disclose or suggest that the load balancer has a means for storing totals of load estimates over a fixed past period, nor means for dynamically selecting a server based on the totals of the load estimates over the fixed past period. These deficiencies are not overcome by resort to Agrawal et al. Agrawal et al disclose a method of improving the performance of a server that is enabled to permit connections to clients so as to persist for a duration equal to a timer value. The server estimates the load on the server and uses the estimate to modify the timer value. The timer value can be set to a longer value when the load on the server is light and to a shorter value when the load on the server is heavy. The server dynamically selects the largest timer that guarantees that the server does not run

out of resources under the current measured load (see Abstract). As such, Agrawal et al merely disclose that the server dynamically selects based on a timer value and does not disclose the above-mentioned features of claims 1, 9 and 10.

Claims 5 and 8 are directed to a server load estimation method and a computer-readable storage medium storing a program for implementing a method for estimating server load which includes at least the steps of measuring a processing load on the server associated with the request and generating data used to estimate the server load based on this measurement result. The data used to estimate the server load are generated by the measurement result and stored in a load estimation table, for example table 103 in Fig. 1. This is used to calculate load evaluation values "L" as shown in Fig. 9, for example.

It is submitted that Brendel et al and Agrawal et al also fail to disclose the above-mentioned features of claims 5 and 8. Namely, these references do not disclose the step of generating data used to estimate server load based on a measurement result.

Furthermore, it is submitted that new claims add further limitations that are neither disclosed nor suggested by the

cited references and further define the present invention over the cited art.

Conclusion

In view of the foregoing, Applicants respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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